PETROLEUM UPSTREAM PROCESS CLASSIFICATION FRAMEWORKSM

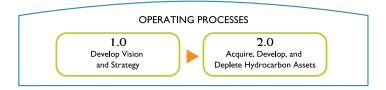
THE PETROLEUM UPSTREAM PROCESS CLASSIFICATION FRAMEWORK

Based on the renowned Process Classification FrameworkSM (PCF), a taxonomy of cross-functional business processes intended to allow objective comparison of performance within and among organizations, and the support of IBM, this industry PCF enables more industry applicable content by outlining and defining processes and activities specific to the Petroleum Upstream industry. This allows organizations to choose the framework most relevant to the specific process improvement need, whether it be benchmarking within or across industries, business process management/re-engineering, or content management. The cross-industry PCF and industry PCFs are available on the APQC website at no charge. IBM provided the subject matter expertise and intellectual property to create the industry specific business process classification frameworks, as part of the IBM's continuing leadership in the promotion of open standards to help organizations evaluate and measure business processes at an industry level.

THE FRAMEWORK FOR PROCESS IMPROVEMENT

Experience shows that the potential of benchmarking to drive dramatic improvement lies squarely in making out-of-the-box comparisons and searching for insights not typically found within intra-industry paradigms. To enable this beneficial benchmarking, the APQC Process Classification FrameworkSM (PCF) serves as a high-level, industry-neutral enterprise process model that allows organizations to see their business processes from a cross-industry viewpoint.

This cross-industry framework has experienced more than 15 years of creative use by thousands of organizations worldwide. The PCF provides the foundation for the Open Standards Benchmarking CollaborativeSM (OSBC) database and the work of its advisory council of global industry leaders. Each version of the PCF will continue to be enhanced as the OSBC database further develops definitions, processes, and measures. The PCF and associated measures and benchmarking surveys are available for download and completion at no charge from the Open Standards Benchmarking Collaborative Web site at www.apqc.org/OSBCdatabase.



MANAGEN	MENT AND SUPPORT PROCESSES						
3.0	.0 Develop and Manage Human Capital						
4.0	Manage Information Technology						
5.0	Manage Financial Resources						
6.0	Acquire, Construct, and Manage Property						
7.0	Manage Environmental Health and Safety (EHS)						
8.0	Manage External Relationships						
9.0	Manage Knowledge Improvement and Change						

HISTORY

The cross-industry Process Classification Framework was originally envisioned as a taxonomy of business processes and a common language through which APQC member organizations could benchmark their processes. The initial design involved APQC and more than 80 organizations with strong interest in advancing the use of benchmarking in the United States and worldwide. Since its inception in 1992, the PCF has seen updates to most of its content. These updates keep the framework current with the ways that organizations do business around the world. In 2008, APQC and IBM worked together to enhance the cross-industry PCF and to develop a number of industry-specific process classification frameworks.





PROCESS CLASSIFICATION FRAMEWORK

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LOOKING FORWARD

The cross industry and industry Process Classification Frameworks are evolving models, which APQC will continue to enhance and improve regularly. Thus, APQC encourages comments, suggestions, and more importantly, the sharing of insights from having applied the PCF within your organization. Share your suggestions and experiences with the PCF by e-mailing pcf_feedback@apqc.org.

ABOUT APOC

An internationally recognized resource for process and performance improvement, APQC helps organizations adapt to rapidly changing environments, build new and better ways to work, and succeed in a competitive marketplace. With a focus on productivity, knowledge management, benchmarking, and quality improvement initiatives, APQC works with its member organizations to identify best practices; discover effective methods of improvement; broadly disseminate findings; and connect individuals with one another and the knowledge, training, and tools they need to succeed. Founded in 1977, APQC is a member-based nonprofit serving organizations around the world in all sectors of business, education, and government. APQC is also a proud winner of the 2003 and 2004 North American Most Admired Knowledge Enterprises (MAKE) awards. This award is based on a study by Teleos, a European based research firm, and the KNOW network.

The PCF is written in United States English language format.

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ABOUT IBM

IBM works with its clients to develop new business designs and technical architectures that allow their businesses the flexibility required to compete in a global business landscape. The business is also adjusting its footprint toward emerging geographies, tapping into IBM's double-digit growth, providing the technology infrastructure they need, and taking advantage of the talent pools provided to better service IBM's clients. IBM's major operations comprise a Global Technology Services segment; a Global Business Services segment; a Systems and Technology segment; a Software segment; and a Global Financing segment. For more information, visit: www.ibm.com/soa

THE PETROLEUM UPSTREAM PROCESS CLASSIFICATION FRAMEWORKSM

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UNDERSTANDING THE NUMBERING SCHEME

Beginning with Version 5.0.0, the PCF uses a numbering scheme that differs from previous versions. The cross-industry framework and the industry-specific frameworks collectively form a library of process

OPERATING PROCESSES

1.0
Develop Vision and Strategy

2.0

Acquire, Develop, and Deplete Hydrocarbon Assets

MANAGEMENT AND SUPPORT PROCESSES							
3.0 Develop and Manage Human Capital							
4.0	Manage Information Technology						
5.0	Manage Financial Resources						
6.0	Acquire, Construct, and Manage Property						
7.0	Manage Environmental Health and Safety (EHS)						
8.0	Manage External Relationships						
9.0	Manage Knowledge Improvement and Change						

elements for the OSBC. Each process element is referred to by two numbers: a number used to locate the content within that particular framework (in the format 1.2.3.4) and a serial number used to uniquely identify the process element across all of the various OSBC frameworks (beginning with 10000).

For example, the process element "1.2 Develop business strategy (10015)" is uniquely identified by the serial number "10015" and the hierarchical reference number "1.2." In industry-specific PCFs, any process element identified as "10015" will have the same scope and definition as a process element of the same number elsewhere, but may be labeled differently.

INTERPRETING THE PCF

Category: The highest level within the PCF is indicated by whole numbers (e.g., 8.0 and 9.0)

Process Group: Items with one decimal numbering (e.g., 8.1 and 9.1) are considered a process group.

Process: Items with two decimal numberings (e.g., 8.1.1 and 9.1.2) are considered processes.

Activity: Items with three decimal numbering (e.g. 8.3.1.1 and 9.1.1.1) are considered activities within a process.

The Petroleum Upstream PCF is based on the cross-industry PCF Version 5.0.0 released in April 2008.

1.0 Develop Vision and Strategy (10002)

1.1 Define the business concept and long-term vision (10014)

- 1.1.1 Assess the external environment (10017)
 - 1.1.1.1 Analyze and evaluate competition (10021)
 - 1.1.1.2 Identify economic trends (10022)
 - 1.1.1.3 Identify political and regulatory issues (10023)
 - 1.1.1.4 Assess new technology innovations (10024)
 - 1.1.1.5 Analyze demographics (10025)
 - 1.1.1.6 Identify social and cultural changes (10026)
 - 1.1.1.7 Identify ecological concerns (10027)

1.1.2 Survey market and determine customer needs and wants (10018)

- 1.1.2.1 Conduct qualitative/quantitative assessments (10028)
- 1.1.2.2 Capture and assess customer needs (10029)
- 1.1.3 Perform internal analysis (10019)
 - 1.1.3.1 Analyze organizational characteristics (10030)
 - 1.1.3.2 Create baselines for current processes (10031)
 - 1.1.3.3 Analyze systems and technology (10032)
 - 1.1.3.4 Analyze financial positions (10033)
 - 1.1.3.5 Identify enterprise core competencies (10034)
- 1.1.4 Establish strategic vision (10020)
 - 1.1.4.1 Align stakeholders around strategic vision (10035)
 - 1.1.4.2 Communicate strategic vision to stakeholders (10036)

1.2 Develop business strategy (10015)

- 1.2.1 Develop overall mission statement (10037)
 - 1.2.1.1 Define current business (10044)
 - 1.2.1.2 Formulate mission (10045)
 - 1.2.1.3 Communicate mission (10046)
- 1.2.2 Evaluate strategic options to achieve the objectives (10038)

- 1.2.2.1 Define strategic options (10047)
- 1.2.2.2 Assess and analyze impact of each option (10048)
- 1.2.3 Select long-term business strategy (10039)
- 1.2.4 Coordinate and align functional and process strategies (10040)
- 1.2.5 Create organizational design (structure, governance, reporting, etc.) (10041)
 - 1.2.5.1 Evaluate breadth and depth of organizational structure (10049)
 - 1.2.5.2 Perform job specific roles mapping and valueadd analyses (10050)
 - 1.2.5.3 Develop role activity diagrams to assess handoff activity (10051)
 - 1.2.5.4 Perform organization redesign workshops (10052)
 - 1.2.5.5 Design the relationships between organizational units (10053)
 - 1.2.5.6 Develop role analysis and activity diagrams for key processes (10054)
 - 1.2.5.7 Assess organizational implication of feasible alternatives (10055)
 - 1.2.5.8 Migrate to new organization (10056)
- 1.2.6 Develop and set organizational goals (10042)
- 1.2.7 Formulate business unit strategies (10043)

1.3 Manage strategic initiatives (10016)

- 1.3.1 Develop strategic initiatives (10057)
- 1.3.2 Evaluate strategic initiatives (10058)
- 1.3.3 Select strategic initiatives (10059)
- 1.3.4 Establish high-level measures (10060)

2.0 Acquire, Develop, and Deplete Hydrocarbon Assets (12983)

2.1 Acquire asset (access) (12984)

- 2.1.1 Strategize acquisition (12985)
 - 2.1.1.1 Define key value drivers (12986)
- 2.1.2 Identify opportunities (12987)
 - 2.1.2.1 Gather/create opportunities (12988)
 - 2.1.2.2 Screen and prioritize opportunities (12989)
 - 2.1.2.3 Develop key alignment points (12990)
 - 2.1.2.4 Engage key decision makers (12991)
 - 2.1.2.5 Select opportunities to evaluate (12992)
- 2.1.3 Evaluate opportunities (12993)
 - 2.1.3.1 Form team and dedicate resources (12994)
 - 2.1.3.2 Conduct technical analysis (12995)
 - 2.1.3.3 Identify sources of value and develop business case (12996)

- 2.1.3.4 Determine value and decide whether to pursue (12997)
- 2.1.4 Pursue opportunities (12998)
 - 2.1.4.1 Confirm potential value of target (12999)
 - 2.1.4.2 Develop transition/ integration plan (13000)
 - 2.1.4.3 Establish price and negotiation strategy (13001)
 - 2.1.4.4 Structure deal, launch offer, close contracts (13002)
 - 2.1.4.5 Finalize agreement and prepare for integration (13003)
- 2.1.5 Handover successful opportunities to exploration, development or production (13004)

Explo	re asset (13005)			2.3.5.2 Compile plan (13047)
2.2.1	Develop exploration strategy (13006)			2.3.5.3 Submit regulatory report (13048)
2.2.2	Acquire seismic data (13007)		2.3.6	Handover appraisal results to development (13049)
2.2.3	Process seismic data (13008)	24	Devel	lop asset (13050)
2.2.4	Develop seismic models (13009)	2.7		Develop facility (13051)
2.2.5	•		2.4.1	2.4.1.1 Prepare conceptual design (13052)
	•			2.4.1.2 Prepare front-end engineering design (13060)
	• • • •			2.4.1.3 Prepare detailed design (13068)
	·			2.4.1.4 Construct and precommission (13075)
	2.2.6.3 Create ready-to-drill inventory (13014)			2.4.1.5 Commission and prepare handover (13079)
2.2.7	Drill exploration wells (13015)		2.4.2	Develop subsurface (13083)
2.2.8	Evaluate exploration wells (13016)			2.4.2.1 Develop preliminary well design (13084)
2.2.9	·			2.4.2.2 Develop detailed well design (13085)
				2.4.2.3 Develop well program (13086)
2.2.10	·			2.4.2.4 Construct well (13087)
Appra				2.4.2.5 Modify well (13093)
2.3.1	Gather data (13020)		0.4.0	2.4.2.6 Abandon well (13094)
	2.3.1.1 Organize asset data (13021)			Submit regulatory reports (13095)
	2.3.1.2 Acquire/process seismic data (13022)		2.4.4	Handover to Production (13096)
	1 1	2.5	Produ	ice asset (13097)
	· · ·			Establish asset depletion strategy (13098)
				2.5.1.1 Define long-term "life of field" strategy (13099)
				2.5.1.2 Define term "operational" plan (13103)
2.3.2	•		2.5.2	Operate asset (13107)
				2.5.2.1 Define operation architecture (13108)
				2.5.2.2 Define production planning (13109)
				2.5.2.3 Execution (13110)
				2.5.2.4 Surveillance (13111)
				2.5.2.5 Production optimization (13112)
				2.5.2.6 Maintenance (13113)
2.3.3	Develop scenarios (13035)		0.5.0	2.5.2.7 Activity management (13121)
	2.3.3.1 Build sub-surface scenarios (13036)		2.5.3	Submit regulatory reports (13126)
	2.3.3.2 Build facility scenarios (13037)	2.6	Exit o	pportunity (13127)
			2.6.1	Develop exit strategy (13128)
			2.6.2	Perform sale or trade (13129)
2.3.4	•			Perform abandonment (13130)
	· · · · · · · · · · · · · · · · · · ·			2.6.3.1 Demolish and secure (13131)
	, , , , , , , , , , , , , , , , , , , ,			2.6.3.2 Restore site (13132)
				2.6.3.3 Prepare handover (13133)
2 2 E	, , , ,			
2.3.3				
	2.3.3.1 Develop proposar (13040)			
	2.2.1 2.2.2 2.2.3 2.2.4 2.2.5 2.2.6 2.2.7 2.2.8 2.2.9 2.2.10 Appra	 2.2.2 Acquire seismic data (13007) 2.2.3 Process seismic data (13008) 2.2.4 Develop seismic models (13009) 2.2.5 Perform basin analysis (13010) 2.2.6 Develop prospect portfolio development (13011)	2.2.1 Develop exploration strategy (13006) 2.2.2 Acquire seismic data (13007) 2.2.3 Process seismic data (13008) 2.2.4 Develop seismic models (13009) 2.2.5 Perform basin analysis (13010) 2.2.6 Develop prospect portfolio development (13011) 2.2.6.1 Perform prospect identification (13012) 2.2.6.2 Perform prospect definition (13013) 2.2.6.3 Create ready-to-drill inventory (13014) 2.2.7 Drill exploration wells (13015) 2.2.8 Evaluate exploration wells (13016) 2.2.9 Submit regulatory reports (13017) 2.2.10 Handover successful exploration wells for appraisal (13018) Appraise asset (13019) 2.3.1 Gather data (13020) 2.3.1.1 Organize asset data (13021) 2.3.1.2 Acquire/process seismic data (13022) 2.3.1.3 Acquire/process well log data (13023) 2.3.1.4 Gather reservoir data (13024) 2.3.1.5 Gather geochemical data (13025) 2.3.1.6 Estimate data uncertainty (13026) 2.3.2.1 Build surface geological model (13028) 2.3.2.2 Build seismic model (13029) 2.3.2.3 Correlate well data (13030) 2.3.2.4 Integrate seismic and well model (13031) 2.3.2.5 Build reservoir model (13032) 2.3.2.6 Characterize reservoir (13033) 2.3.2.7 Estimate hydrocarbon potential (13034) 2.3.3 Develop scenarios (13035) 2.3.3.1 Build sub-surface scenarios (13036) 2.3.3.2 Build facility scenarios (13037) 2.3.3.3 Build operating scenarios (13038) 2.3.3.4 Develop HSE definitions (13039) 2.3.4.1 Evaluate economic viability (13040) 2.3.4.2 Evaluate economic viability (13040) 2.3.4.3 Perform uncertainty analysis (13044) 2.3.5 Propose development plan (13045)	2.2.1 Develop exploration strategy (13006) 2.2.2 Acquire seismic data (13007) 2.2.3 Process seismic data (13008) 2.2.4 Develop seismic models (13009) 2.2.5 Perform basin analysis (13010) 2.2.6 Develop prospect portfolio development (13011) 2.2.6.1 Perform prospect definition (13012) 2.2.6.2 Perform prospect definition (13013) 2.2.6.3 Create ready-to-drill inventory (13014) 2.2.7 Drill exploration wells (13015) 2.2.8 Evaluate exploration wells (13016) 2.2.9 Submit regulatory reports (13017) 2.2.10 Handover successful exploration wells for appraisal (13018) Appraise asset (13019) 2.3.1 Gather data (13020) 2.3.1.1 Organize asset data (13021) 2.3.1.2 Acquire/process well log data (13023) 2.3.1.4 Gather reservoir data (13024) 2.3.1.5 Gather geochemical data (13024) 2.3.1.6 Estimate data uncertainty (13026) 2.3.2 Develop asset model (13027) 2.3.2.1 Build surface geological model (13028) 2.3.2.2 Build seismic model (13029) 2.3.2.3 Correlate well data (13030) 2.3.2.4 Integrate seismic and well model (13031) 2.3.2.5 Build reservoir model (13032) 2.3.2.6 Characterize reservoir (13033) 2.3.2.7 Estimate hydrocarbon potential (13034) 2.3.3.2 Build sub-surface scenarios (13036) 2.3.3.3 Build sub-surface scenarios (13037) 2.3.3.3 Build sub-surface scenarios (13038) 2.3.3.4 Develop HSE definitions (13039) 2.3.4.1 Evaluate well costs (13041) 2.3.4.2 Evaluate facility and pipeline costs (13042) 2.3.4.3 Perform economic analysis (13044) 2.3.4.4 Perform uncertainty analysis (13044) 2.3.5 Propose development plan (13045)

3.0 Develop and Manage Human Capital (10007)

3.1			anage human resources (HR) planning, trategies (10409)			3.2.3.2 3.2.3.3	Interview candidates (10457) Test candidates (10458)
	3.1.1	Develop	human resources strategy (10415)			3.2.3.4	Select and reject candidates (10459)
		3.1.1.1	Identify strategic HR needs (10418)				
		3.1.1.2	Define HR and business function roles and accountability (10419)		3.2.4	3.2.4.1	e pre-placement verification (10442) Complete candidate background information
		3.1.1.3	Determine HR costs (10420)			3.2.4.2	(10460) Conduct pre-employment screening (10461)
		3.1.1.4 3.1.1.5	Establish HR measures (10421) Communicate HR strategies (10422)			3.2.4.2	Recommend/not recommend candidate (10462)
	3.1.2		and implement human resources plans		3.2.5		e new hire/re-hire (10443)
	0.1.2	(10416)	and implement human recourses plane			3.2.5.1	Draw up and make offer (10463)
		3.1.2.1	Gather skill requirements according to			3.2.5.2	Negotiate offer (10464)
			corporate strategy and market environment			3.2.5.3	Hire candidate (10465)
		0.4.0.0	(10423)		3.2.6		andidates (10444)
		3.1.2.2	Plan employee resourcing requirements per			3.2.6.1	Create applicant record (10466)
		3.1.2.3	unit/organization (10424) Develop compensation plan (10425)			3.2.6.2 3.2.6.3	Manage/track applicant data (10467) Archive and retain records of non-hires (10468)
		3.1.2.3	Develop succession plan (10426)			3.2.0.3	Alcilive and retail records of hon-filles (10400)
		3.1.2.5	Develop employee diversity plan (10427)	3.3	Devel	op and c	ounsel employees (10411)
		3.1.2.6	Develop other HR programs (10428)		3.3.1	•	e employee orientation and deployment
		3.1.2.7	Develop HR policies (10429)			(10469)	
		3.1.2.8	Administer HR policies (10430)			3.3.1.1	Create/maintain employee on-boarding
		3.1.2.9	Plan employee benefits (10431)			3.3.1.2	program (10474) Introduce new employees to managers (10475)
		3.1.2.10	Develop strategy for HR systems/technologies/tools (10432)			3.3.1.3	Introduce new employees to managers (10473)
		3.1.2.11	Develop workforce strategy models (10433)			3.3.1.4	Evaluate the effectiveness of the employee
	3.1.3		and update plans (10417)				on-boarding program (11243)
	0.1.0	3.1.3.1	Measure realization of objectives (10434)		3.3.2		e employee performance (10470)
		3.1.3.2	Measure contribution to business strategy			3.3.2.1	Define performance objectives (10479)
			(10435)			3.3.2.2	Review, appraise, and manage employee
		3.1.3.3	Communicate plans and provide updates to			3.3.2.3	performance (10480) Evaluate and review performance program
		3.1.3.4	stakeholders (10436) Determine value added from HR function			J.J.Z.J	(10481)
		3.1.3.4	(10437)		3.3.3	Manage	e employee relations (10471)
		3.1.3.5	Review and revise HR plans (10438)		0.0.0	3.3.3.1	Manage health and safety (10482)
2.0	D		·			3.3.3.2	Manage labor relations (10483)
3.2			e, and select employees (10410)			3.3.3.3	Manage collective bargaining process (10484)
	3.2.1	3.2.1.1	and develop employee requisitions (10439) Align staffing plan to workforce plan and			3.3.3.4	Manage labor management partnerships
		J.Z.1.1	business unit strategies/resource needs (10445)		004	N 4	(10485)
		3.2.1.2	Develop and open job requisition (10446)		3.3.4	3.3.4.1	e employee development (10472) Develop competency management plans
		3.2.1.3	Develop a job description (10447)			3.3.4.1	(10486)
		3.2.1.4	Post requisition (10448)			3.3.4.2	Define employee development guidelines
		3.2.1.5	Manage internal/external job posting Web				(10487)
		2216	sites (10449)			3.3.4.3	Develop employee career plans (10488)
		3.2.1.6 3.2.1.7	Change/Update requisition (10450) Notify hiring manager (10451)			3.3.4.4	Manage employee skills development (10489)
		3.2.1.8	Manage requisition date (10452)		3.3.5	•	o and train employees (10473)
	3.2.2		Source candidates (10440)			3.3.5.1	Align employee and organization development
	O.L.L	3.2.2.1	Determine recruitment methods (10453)			3.3.5.2	needs (10490) Develop competencies (10491)
		3.2.2.2	Perform recruiting activities/events (10454)			3.3.5.3	Establish training needs by analysis of required
		3.2.2.3	Manage recruitment vendors (10455)			0.0.0.0	and available skills (10492)
	3.2.3		and select candidates (10441)			3.3.5.4	Develop, conduct, and manage employee and/
		3.2.3.1	Identify and deploy candidate selection tools (10456)				or management training programs (10493)

Reward and retain employees (10412) Re-deploy and retire employees (10413) Develop and manage reward, recognition, and Manage promotion and demotion process (10512) 3.5.1 motivation programs (10494) Manage separation (10513) 3.5.2 3.4.1.1 Develop salary/compensation structure and 3.5.3 Manage retirement (10514) plan (10498) 3.5.4 Manage leave of absence (10515) Develop benefits and reward plan (10499) 3.4.1.2 3.5.5 Develop and implement employee outplacement 3.4.1.3 Perform competitive analysis of benefit and (10516)rewards (10500) Manage deployment of personnel (10517) 3.5.6 3.4.1.4 Identify compensation requirements based on financial, benefits, and HR policies (10501) Relocate employees and manage assignments 3.5.7 3.4.1.5 Administer compensation and rewards to (10518)employees (10502) 3.5.8 Manage employment reduction and retirement 3.4.1.6 Reward and motivate employees (10503) (10519)3.4.2 Manage and administer benefits (10495) 3.5.9 Manage expatriates (10520) Deliver employee benefits program (10504) 3.4.2.1 3.5.10 Manage employee relocation process (10521) 3.4.2.2 Administer benefit enrollment (10505) 3.4.2.3 Process claims (10506) Manage employee information (10414) 3.4.2.4 Perform benefit reconciliation (10507) Manage reporting processes (10522) 3.6.1 3.4.3 Manage employee assistance and retention (10496) 3.6.2 Manage employee inquiry process (10523) 3.4.3.1 Deliver programs to support work/life balance Manage and maintain employee data (10524) 3.6.3 for employees (10508) 3.6.4 Manage human resource information systems 3.4.3.2 Develop family support systems (10509) (HRIS) (10525) 3.4.3.3 Review retention and motivation indicators 3.6.5 Develop and manage employee metrics (10526)

Review compensation plan (10511)

Confirm enterprise architecture maintenance

approach (10612)

3.4.3.4

4.1.2.2

3.4.4 Payroll administration (10497)

4.0 Manage Information Technology (10008)

3.6.6

3.6.7

3.6.7.1 3.6.7.2

3.6.7.3

3.6.7.4

4.1.5.1

Develop and manage time and attendance (10527)

Develop employee communication plan (10529)

Manage/collect employee suggestions and perform employee research (10530)

Publish employee communications (10532)

Develop and maintain IT services and solutions

cost transparency (10622)

Manage employee grievances (10531)

Manage employee communication (10528)

4.1	Mana 4.1.1	-	siness of information technology (10563) the enterprise IT strategy (10570)		4.1.2.3	Maintain the relevance of the enterprise architecture (10613)
		4.1.1.1 4.1.1.2	Build strategic intelligence (10603) Identify long-term IT needs of the enterprise in		4.1.2.4	Act as clearinghouse for IT research and innovation (10614)
			collaboration with stakeholders (10604)		4.1.2.5	Govern the enterprise architecture (10615)
		4.1.1.3	Define strategic standards, guidelines and	4.1.3	Manag	e the IT portfolio (10572)
			principles (10605)		4.1.3.1	Establish the IT portfolio (10616)
		4.1.1.4	Define and establish IT architecture and development standards (10606)		4.1.3.2	Analyze and evaluate the value of the IT portfolio for the enterprise (10617)
		4.1.1.5	Define strategic vendors for IT components (10607)		4.1.3.3	Provision resources in accordance with strategic priorities (10618)
		4.1.1.6	Establish IT governance organization and	4.1.4	Perform	n IT research and innovation (10573)
		4.1.1.7	processes (10608) Build strategic plan to support business		4.1.4.1	Research technologies to innovate IT services and solutions (10620)
	440	4.1.2.1 Establish the enterprise architecture definition		4.1.4.2	Transition viable technologies for IT services	
	4.1.2				and solutions development (10621)	
			4.1.5	Perform	n IT financial management (10574)	
			(10611)		4151	Develon and maintain IT services and solutions

		4.1.5.2	Establish and maintain accounting process (10623)			4.2.4.3	Initiate improvements based on customer satisfaction patterns (10649)
		4.1.5.3	Tie project funding to business case decision checkpoints (10624)		4.2.5	Market 4.2.5.1	IT services and solutions (10582) Develop IT services and solutions marketing
	4.1.6		and communicate IT business value and				strategy (10650)
		performa 4.1.6.1	ance (10575) Establish and monitor key performance			4.2.5.2	Develop and manage IT customer strategy (10651)
			indicators (10625)			4.2.5.3	Manage IT services and solutions advertising
		4.1.6.2	Evaluate IT plan performance (10626)			4054	and promotional campaigns (10652)
		4.1.6.3	Communicate IT value (10627)			4.2.5.4	Process and track IT services and solutions orders (10653)
	4.1.7	4.1.7.1	IT staff management (10576) Develop IT leadership and staff (10628)				orders (10000)
		4.1.7.1	Manage IT staff performance (10629)	4.3	Mana	ge busin	ess resiliency and risk (11216)
		¬.1.7.∠	Manage II starr performance (10023)		4.3.1	Develop	and manage business resilience (11217)
	4.1.8	Manage	IT suppliers and contracts (10577)			4.3.1.1	Develop the business resilience strategy
		4.1.8.1	Develop IT (development and delivery)				(11221)
			sourcing strategies (10630)			4.3.1.2	Perform continuous business operations planning (11222)
		4.1.8.2	Negotiate with suppliers (10631)			4.3.1.3	Test continuous business operations (11223)
		4.1.8.3	Establish and maintain supplier relationships			4.3.1.4	Maintain continuous business operations
		4104	(10632)				(11224)
		4.1.8.4 4.1.8.5	Evaluate supplier performance (10633) Assess contract performance (10634)		4.3.2	Develop	and manage regulatory compliance (11218)
		4.1.0.5	Assess contract performance (10034)			4.3.2.1	Develop the regulatory compliance strategy
4.2	Devel	op and ma	anage IT customer relationships (10564)				(11225)
	4.2.1		IT services and solutions strategy (10578)			4.3.2.2	Establish regulatory compliance controls (11226)
		4.2.1.1	Research IT services and solutions to address business and user requirements (11244)			4.3.2.3	Manage regulatory compliance remediation (11227)
		4.2.1.2	Translate business and user requirements into		4.3.3		integrated risk management (11219)
		1212	IT services and solutions requirements (11245)			4.3.3.1	Develop an integrated risk strategy and
		4.2.1.3	Formulate IT services and solutions strategic initiatives (11246)			4.3.3.2	approach (11228) Manage integrated risks (11229)
		4.2.1.4	Coordinate strategies with internal		4.3.4		and implement security, privacy, and data
			stakeholders to ensure alignment (11247)		4.5.4		on controls (11220)
		4.2.1.5	Evaluate and select IT services and solutions			4.3.4.1	Establish information security, privacy, and
			strategic initiatives (11248)				data protection strategies and levels (11230)
	4.2.2	•	and manage IT service levels (10579)			4.3.4.2	Test, evaluate, and implement information
		4.2.2.1	Create and maintain the IT services and				security, and privacy and data protection
		4.2.2.2	solutions catalog (10640) Establish and maintain business and IT service				controls (11231)
		4.2.2.2	level agreements (10641)	4.4	Mana	ge enterp	orise information (10565)
		4.2.2.3	Evaluate and report service level attainment		4.4.1	Develop	information and content management
			results (10642)			_	es (10583)
		4.2.2.4	Communicate business and IT service level			4.4.1.1	Understand information and content
			improvement opportunities (10643)				management needs and the role of IT services for executing the business strategy (10654)
	4.2.3		demand side management (DSM) for IT			4.4.1.2	Assess the information and content manage-
		services				7.7.1.2	ment implications of new technologies (10655)
		4.2.3.1	Analyze IT services and solutions consumption and usage (10644)			4.4.1.3	Identify and prioritize information and content
			and usage (10044)				management actions (10656)
		4.2.3.2	Develop and implement incentive programs		4.4.2		he enterprise information architecture
			that improve consumption efficiency (10645)			(10584)	
		4.2.3.3	Develop volume/unit forecast for IT services			4.4.2.1	Define information elements, composite
			and solutions (10646)				structure, logical relationships and constraints, taxonomy, and derivation rules (10657)
	4.2.4	_	IT customer satisfaction (10581)			4.4.2.2	Define information access requirements (10658)
		4.2.4.1	Capture and analyze customer satisfaction			4.4.2.3	Establish data custodianship (10659)
		1212	(10647)			4.4.2.4	Manage changes to content data architecture
		4.2.4.2	Assess and communicate customer satisfaction patterns (10648)				requirements (10660)

	4.4.3	ivianage	e information resources (10585)	4.6	nebic	oy intorma	ation technology solutions (10567)
		4.4.3.1	Define the enterprise information/data policies and standards (10661)		4.6.1	Develop 4.6.1.1	the IT deployment strategy (10592) Establish IT services and solutions change
		4.4.3.2	Develop and implement data and content administration (10662)			4.6.1.2	policies (10686) Define deployment process, procedures, and
	4.4.4	Perform	enterprise data and content management			1.0.1.2	tools standards (10687)
		(10586) 4.4.4.1	Define sources and destinations of content			4.6.1.3	Select deployment methodologies and tools (10688)
		7.7.7.1	data (10663)		4.6.2	Plan and	d implement changes (10593)
		4.4.4.2	Manage technical interfaces to users of		7.0.2	4.6.2.1	Plan change deployment (10689)
			content (10664)			4.6.2.2	Communicate changes to stakeholders (10690)
		4.4.4.3	Manage retention, revision, and retirement of enterprise information (10665)			4.6.2.3 4.6.2.4	Administer change schedule (10691) Train impacted users (10692)
4.5	Dovol	on and m	aintain information technology solutions			4.6.2.5	Distribute and install change (10693)
4.5	(10566		amam mormation technology solutions			4.6.2.6	Verify change (10694)
	4.5.1		the IT development strategy (10587)		4.6.3		d manage releases (10594)
	1.0.1	4.5.1.1	Establish sourcing strategy for IT development (10666)			4.6.3.1	Understand and coordinate release design and acceptance (10695)
		4.5.1.2	Define development processes, methodologies,			4.6.3.2	Plan release rollout (10696)
			and tools standards (10667)			4.6.3.3	Distribute and install release (10697)
		4.5.1.3	Select development methodologies and tools			4.6.3.4	Verify release (10698)
			(10668)	4.7			pport information technology services
	4.5.2		IT services and solutions life cycle		(1056	•	
		4.5.2.1	g (10588) Plan development of new requirements		4.7.1		IT services and solution delivery strategy
		4.0.2.1	(10669)			(10595) 4.7.1.1	Establish sourcing strategy for IT delivery
		4.5.2.2	Plan development of feature and functionality			7.7.1.1	(10699)
			enhancement (10670)			4.7.1.2	Define delivery processes, procedures, and
		4.5.2.3	Develop life cycle plan for IT services and				tools standards (10700)
	4.5.3	Dovelon	solutions (10671)			4.7.1.3	Select delivery methodologies and tools (10701)
	4.3.3		and maintain IT services and solutions cture (10589)		4.7.2	Develop 4.7.2.1	IT support strategy (10596) Establish sourcing strategy for IT support
		4.5.3.1	Create IT services and solutions architecture			4.7.2.1	(10702)
			(10672)			4.7.2.2	Define IT support services (10703)
		4.5.3.2	Revise IT services and solutions architecture (10673)		4.7.3	Manage	e IT infrastructure resources (10597)
		4.5.3.3	Retire IT services and solutions architecture			4.7.3.1	Manage IT inventory and assets (10704)
		1.0.0.0	(10674)		474	4.7.3.2	Manage IT resource capacity (10705)
	4.5.4	Create I	T services and solutions (10590)		4.7.4	4.7.4.1	e IT infrastructure operations (10598) Deliver IT services and solutions (10706)
		4.5.4.1	Understand confirmed requirements (10675)			4.7.4.2	Perform IT operations support services (10707)
		4.5.4.2	Design IT services and solutions (10676)		4.7.5		IT services and solutions (10599)
		4.5.4.3	Acquire/Develop IT service/solution components (10677)			4.7.5.1	Manage availability (10708)
		4.5.4.4	Train services and solutions resources (10678)			4.7.5.2	Manage facilities (10709)
		4.5.4.5	Test IT services/solutions (10679)			4.7.5.3 4.7.5.4	Manage backup/recovery (10710) Manage performance and capacity (10711)
		4.5.4.6	Confirm customer acceptance (10680)			4.7.5.4	Manage incidents (10712)
	4.5.5		n IT services and solutions (10591)			4.7.5.6	Manage problems (10713)
		4.5.5.1	Understand upkeep/enhance requirements and			4.7.5.7	Manage inquiries (10714)
			defect analysis (10681)	4.8	Mana	ne IT kno	wledge (10569)
		4.5.5.2	Design change to existing IT service/solution	7.0	4.8.1	_	o IT knowledge management strategy (10600)
			(10682)			4.8.1.1	Understand IT knowledge needs (10715)
		4.5.5.3	Acquire/develop changed IT service/solution			4.8.1.2	Understand current IT knowledge flow (10716)
		1554	component (10683)			4.8.1.3	Coordinate strategy and roles with the
		4.5.5.4 4.5.5.5	Test IT service/solution change (10684) Retire solutions and services (10685)			1011	enterprise KM function (10717)
		⊤.J.J.J	notine solutions and services (10000)			4.8.1.4	Plan IT knowledge management actions and priorities (10718)

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4.8.2	Develop	and maintain IT knowledge map (10601)	4.8.3	Manage	e IT knowledge life cycle (10602)
	4.8.2.1	Define knowledge elements, logical relationships and constraints, and currency		4.8.3.1	Gather knowledge elements from IT knowledge sources (10723)
		rules (10719)		4.8.3.2	Evaluate, create, and codify knowledge
	4.8.2.2	Identify IT knowledge sources and repositories			elements (10724)
		(10720)		4.8.3.3	Deploy codified IT knowledge (10725)
	4.8.2.3	Identify IT knowledge-sharing opportunities		4.8.3.4	Update and retire IT knowledge (10726)
		(10721)		4.8.3.5	Evaluate and improve IT knowledge strategies
	4.8.2.4	Define IT knowledge processes and approaches (10722)			and processes (10727)

5.0 Manage Financial Resources (10009)

5.1	Perfo	rm planni	ng and management accounting (10728)		5.2.2	Invoice	customer (10743)
	5.1.1	Perform	planning/budgeting/forecasting (10738)			5.2.2.1	Maintain customer/product master files
		5.1.1.1	Develop and maintain budget policies and				(10794)
			procedures (10771)			5.2.2.2	Generate customer billing data (10795)
		5.1.1.2	Prepare periodic budgets and plans (10772)			5.2.2.3	Transmit billing data to customers (10796)
		5.1.1.3	Prepare periodic financial forecasts (10773)			5.2.2.4	Post receivable entries (10797)
	5.1.2		cost accounting and control (10739)			5.2.2.5	Resolve customer billing inquires (10798)
		5.1.2.1	Perform inventory accounting (10774)		5.2.3		s accounts receivable (AR) (10744)
		5.1.2.2	Perform cost of sales analysis (10775)			5.2.3.1	Establish AR policies (10799)
		5.1.2.3	Perform product costing (10776)			5.2.3.2	Receive/Deposit customer payments (10800)
		5.1.2.4	Perform variance analysis (10777)			5.2.3.3	Apply cash remittances (10801)
		5.1.2.5	Report on profitability (11175)			5.2.3.4	Prepare AR reports (10802)
	5.1.3		cost management (10740)			5.2.3.5	Post AR activity to the general ledger (10803)
		5.1.3.1	Determine key cost drivers (10778)		5.2.4		e and process collections (10745)
		5.1.3.2	Measure cost drivers (10779)			5.2.4.1	Establish policies for delinquent accounts
		5.1.3.3	Determine critical activities (10780)			F 0 4 0	(10804)
		5.1.3.4	Manage asset resource deployment and			5.2.4.2	Analyze delinquent account balances (10805)
			utilization (10781)			5.2.4.3	Correspond/Negotiate with delinquent accounts (10806)
	5.1.4		e and manage financial performance (10741)			5.2.4.4	Discuss account resolution with internal
		5.1.4.1	Assess customer and product profitability (10782)				parties (10807)
		5.1.4.2	Evaluate new products (10783)			5.2.4.5	Process adjustments/write-off balances
		5.1.4.3	Perform life cycle costing (10784)				(10808)
		5.1.4.4	Optimize customer and product mix (10785)		5.2.5		e and process adjustments/deductions
		5.1.4.5	Track performance of new customer and			(10746)	
			product strategies (10786)			5.2.5.1	Establish policies/procedures for adjustments
		5.1.4.6	Prepare activity-based performance measures				(10809)
			(10787)			5.2.5.2	Analyze adjustments (10810)
		5.1.4.7	Manage continuous cost improvement (10788)			5.2.5.3	Correspond/Negotiate with customer (10811)
5.2	Perfo	rm revenu	ie accounting (10729)			5.2.5.4	Discuss resolution with internal parties (10812)
J. <u>Z</u>	5.2.1		customer credit (10742)			5.2.5.5 5.2.5.6	Prepare chargeback invoices (10813) Process related entries (10814)
	J.Z. I	5.2.1.1	Establish credit (10742)			3.2.3.0	Frocess related entires (10014)
		5.2.1.1	Analyze/Approve new account applications	5.3	Perfo	rm genera	al accounting and reporting (10730)
		J.Z. I.Z	(10790)		5.3.1	_	e policies and procedures (10747)
		5.2.1.3	Review existing accounts (10791)			5.3.1.1	Negotiate service level agreements (10815)
		5.2.1.4	Produce credit/collection reports (10792)			5.3.1.2	Establish accounting policies (10816)
		5.2.1.5	Reinstate or suspend accounts based on credit			5.3.1.3	Set and enforce approval limits (10817)
		3.2.1.0	policies (10793)			5.3.1.4	Establish common financial systems (10818)

	5.3.2		general accounting (10/48)		5.4.2		capital project accounting (10/52)
		5.3.2.1	Maintain chart of accounts (10819)			5.4.2.1	Create project account codes (10848)
		5.3.2.2	Process journal entries (10820)			5.4.2.2	Record project-related transactions (10849)
		5.3.2.3	Process allocations (10821)			5.4.2.3	Monitor and track capital projects and budget
		5.3.2.4	Process period end adjustments (e.g., accruals,				spending (10850)
			currency conversions, etc.) (10822)			5.4.2.4	Close/capitalize projects (10851)
		5.3.2.5	Post and reconcile intercompany transactions			5.4.2.5	Measure financial returns on completed
			(10823)				capital projects (10852)
		5.3.2.6	Reconcile GL accounts (10824)				
		5.3.2.7	Perform consolidations and process	5.5	Proce	ess payrol	I (10732)
		J.J.Z.1	eliminations (10825)		5.5.1	Report t	ime (10753)
		5.3.2.8	Prepare trial balance (10826)		0.0	5.5.1.1	Establish policies and procedures (10853)
			·			5.5.1.2	Collect and record employee time worked
		5.3.2.9	Prepare and post management adjustments			0.0.1.2	(10854)
			(10827)			5.5.1.3	Analyze and report paid and unpaid leave
	5.3.3		fixed asset accounting (10749)			J.J.1.J	(10855)
		5.3.3.1	Establish fixed asset policies and procedures			5.5.1.4	
			(10828)			3.3.1.4	Monitor regular, overtime, and other hours (10856)
		5.3.3.2	Maintain fixed asset master data files (10829)			5.5.1.5	
		5.3.3.3	Process and record fixed asset additions and				Analyze and report employee utilization (10857)
			retires (10830)		5.5.2	_	e pay (10754)
		5.3.3.4	Process and record fixed asset adjustments,			5.5.2.1	Enter employee time worked into payroll
			enhancements, revaluations, and transfers				system (10858)
			(10831)			5.5.2.2	Maintain and administer employee earnings
		5.3.3.5	Process and record fixed asset maintenance				information (10859)
			and repair expenses (10832)			5.5.2.3	Maintain and administer applicable deductions
		5.3.3.6	Calculate and record depreciation expense				(10860)
			(10833)			5.5.2.4	Monitor changes in tax status of employees
		5.3.3.7	Reconcile fixed asset ledger (10834)				(10861)
		5.3.3.8	Track fixed assets including physical inventory			5.5.2.5	Process and distribute payments (10862)
			(10835)			5.5.2.6	Process and distribute manual checks (10863)
		5.3.3.9	Provide fixed asset data to support tax,			5.5.2.7	Process period end adjustments (10864)
			statutory, and regulatory reporting (10836)			5.5.2.8	Respond to employee payroll inquires (10865)
	5.3.4	Perform	financial reporting (10750)		5.5.3	Process	payroll taxes (10755)
	0.0.1	5.3.4.1	Prepare business unit financial statements			5.5.3.1	Calculate and pay applicable payroll taxes
		0.0.7.1	(10837)				(10866)
		5.3.4.2	Prepare consolidated financial statements			5.5.3.2	Produce and distribute employee annual tax
		0.0.7.2	(10838)				statements (10867)
		5.3.4.3	Perform business unit reporting/review			5533	File regulatory payroll tax forms (10868)
		5.5.4.5	management reports (10839)			0.0.0.0	The regulatory payron tax rolling (10000)
		5.3.4.4	Perform consolidated reporting/review of cost	5.6	Proce	ess accou	nts payable and expense reimbursements
		5.5.4.4	management reports (10840)		(10733	3)	
		5.3.4.5	Prepare statements for board review (10841)		5.6.1	Process	accounts payable (AP) (10756)
		5.3.4.6	Produce quarterly/annual filings and			5.6.1.1	Verify AP pay file with PO vendor master file
		0.3.4.0					(10869)
		E 2 4 7	shareholder reports (10842) Produce regulatory reports (10843)			5.6.1.2	Maintain/manage electronic commerce (10870)
		5.3.4.7	Produce regulatory reports (10843)			5.6.1.3	Audit invoices and key data in AP system (10871)
5.4	Mana	ne fixed a	sset project accounting (10731)			5.6.1.4	Approve payments (10872)
• • •	5.4.1		capital planning and project approval			5.6.1.5	Process financial accruals and reversals (10873)
	0	(10751)	capital planning and project approval			5.6.1.6	Process taxes (10874)
		5.4.1.1	Develop capital investment policies and			5.6.1.7	Research/resolve exceptions (10875)
		5. 1. 1. 1	procedures (10844)			5.6.1.8	Process payments (10876)
		5.4.1.2	Develop and approve capital expenditure plans			5.6.1.9	Respond to AP inquires (10877)
		J.T. I.L	and budgets (10845)			5.6.1.10	Retain records (10878)
		5.4.1.3	Review and approve capital projects and fixed			5.6.1.11	Adjust accounting records (10879)
		J.4.1.J	asset acquisitions (10846)		E C O		
		5.4.1.4	Conduct financial justification for project		5.6.2		expense reimbursements (10757)
		J.4.1.4	approval (10847)			5.6.2.1	Establish and communicate expense reim-
			approvar (10047)				bursement policies and approval limits (10880)

E 7	Mono	5.6.2.2 5.6.2.3 5.6.2.4 5.6.2.5	Capture and report relevant tax data (10881) Approve reimbursements and advances (10882) Process reimbursements and advances (10883) Manage personal accounts (10884)			5.7.5.2 5.7.5.3 5.7.5.4 5.7.5.5	Manage foreign exchange risk (11210) Manage exposure risk (11211) Develop and execute hedging transactions (11212) Evaluate and refine hedging positions (11213)
5.7		_	ry operations (10734)			5.7.5.6	Produce hedge accounting transactions and
	5.7.1	_	treasury policies and procedures (10758)				reports (11214)
		5.7.1.1	Establish scope and governance of treasury			5.7.5.7	Monitor credit (11215)
		5740	operations (10885)	EO	Mono	ao intorn	ol controlo /1072E\
		5.7.1.2	Establish and publish treasury policies (10886)	5.8		_	al controls (10735)
		5.7.1.3	Develop treasury procedures (10887)		5.8.1		h internal controls, policies and procedures
		5.7.1.4	Monitor treasury procedures (10888)			(10762)	
		5.7.1.5	Audit treasury procedures (10889)			5.8.1.1	Establish board of directors and audit
		5.7.1.6	Revise treasury procedures (10890)			E 0 1 0	committee (10914)
		5.7.1.7	Develop and confirm internal controls for			5.8.1.2	Define and communicate code of ethics (10915)
		5740	treasury (10891)			5.8.1.3	Assign roles and responsibility for internal
		5.7.1.8	Define system security requirements (10892)			5044	controls (10916)
	5.7.2	_	cash (10759)			5.8.1.4	Define business process objectives and risks
		5.7.2.1	Manage and reconcile cash positions (10893)			F 0 1 F	(11250)
		5.7.2.2	Manage cash equivalents (10894)			5.8.1.5	Define entity/unit risk tolerances (11251)
		5.7.2.3	Process and oversee electronic fund transfers		5.8.2		controls and monitor compliance with
			(EFTs) (10895)				controls policies and procedures (10763)
		5.7.2.4	Develop cash flow forecasts (10896)			5.8.2.1	Design and implement control activities (10917)
		5.7.2.5	Manage cash flows (10897)			5.8.2.2	Monitor control effectiveness (10918)
		5.7.2.6	Produce cash management accounting			5.8.2.3	Remediate control deficiencies (10919)
			transactions and reports (10898)			5.8.2.4	Create compliance function (10920)
		5.7.2.7	Manage and oversee banking relationships			5.8.2.5	Operate compliance function (10921)
			(10899)			5.8.2.6	Implement and maintain controls-related
		5.7.2.8	Analyze, negotiate, resolve, and confirm bank				enabling technologies and tools (10922)
			fees (10900)		5.8.3		on internal controls compliance (10764)
	5.7.3	_	in-house bank accounts (10760)			5.8.3.1	Report to external auditors (10923)
		5.7.3.1	Manage in-house bank accounts for			5.8.3.2	Report to regulators, share/debt-holders,
		F 7 0 0	subsidiaries (10901)			F 0 0 0	securities exchanges, etc. (10924)
		5.7.3.2	Manage and facilitate inter-company			5.8.3.3	Report to third parties (e.g., business partners)
		F 7 0 0	borrowing transactions (10902)			E 0 0 4	(10925)
		5.7.3.3	Manage centralized outgoing payments on			5.8.3.4	Report to internal management (10926)
		5.7.3.4	behalf of subsidiaries (10903) Manage central incoming payments on behalf	5.9	Mana	ge taxes	(10736)
		5.7.5.4	of subsidiaries (10904)		5.9.1		tax strategy and plan (10765)
		5.7.3.5	Manage internal payments and netting		0.0.1	5.9.1.1	Develop foreign, national, state and local tax
		J.7.J.J	transactions (10905)			0.0.1.1	strategy (10927)
		5.7.3.6	Calculate interest and fees for in-house bank			5.9.1.2	Consolidate and optimize total tax plan (10928)
		0.7.0.0	accounts (10906)			5.9.1.3	Maintain tax master data (10929)
		5.7.3.7	Provide account statements for in-house bank		5.9.2		taxes (10766)
		0.7.0.7	accounts (10907)		0.0.2	5.9.2.1	Perform tax planning/strategy (10930)
	5.7.4	Manago	debt and investment (10761)			5.9.2.2	Prepare returns (10931)
	3.7.4	5.7.4.1	Manage financial intermediary relationships			5.9.2.3	Prepare foreign taxes (10932)
		J.7.4.1	(10908)			5.9.2.4	Calculate deferred taxes (10933)
		5.7.4.2	Manage liquidity (10909)			5.9.2.5	Account for taxes (10934)
		5.7.4.3	Manage issuer exposure (10910)			5.9.2.6	Monitor tax compliance (10935)
		5.7.4.4	Process and oversee debt and investment			5.9.2.7	Address tax inquiries (10936)
		J.7.T.T	transactions (10911)				
		5.7.4.5	Process and oversee foreign currency	5.10	Mana	ge interna	ational funds/consolidation (10737)
		J.7. T.U	transactions (10912)		5.10.1	Monitor	international rates (10767)
		5.7.4.6	Produce debt and investment accounting		5.10.2	Manage	transactions (10768)
		5.7.1.0	transaction reports (10913)			_	currency exposure/hedge currency (10769)
	5.7.5	Manago	financial risks (11208)				esults (10770)
	0.7.0	5.7.5.1	Manage interest rate risk (11209)		5.15.T		
			3				

6.0 Acquire, Construct, and Manage Property (10010)

6.1 Design and construct/acquire non-productive assets (10937)

- 6.1.1 Develop property strategy and long term vision (10941)
 - 6.1.1.1 Confirm alignment of property requirements with business strategy (10955)
 - 6.1.1.2 Assess the external environment (10956)
 - 6.1.1.3 Determine build or buy decision (10957)
- 6.1.2 Develop, construct, and modify sites (10942)
- 6.1.3 Plan facility (10943)
 - 6.1.3.1 Design facility (10958)
 - 6.1.3.2 Analyze budget (10959)
 - 6.1.3.3 Select property (10960)
 - 6.1.3.4 Negotiate terms for facility (10961)
 - 6.1.3.5 Manage construction or modification to building (10962)
- 6.1.4 Provide workspace and assets (10944)
 - 6.1.4.1 Acquire workspace and assets (10963)
 - 6.1.4.2 Change fit/form/function of workspace and assets (10964)

6.2 Maintain non-productive assets (10938)

- 6.2.1 Move people and assets (10945)
 - 5.2.1.1 Relocate people (10965)
 - 5.2.1.2 Relocate material and tools (10966)
- 6.2.2 Repair workplace and assets (10946)
- 6.2.3 Provide preventative maintenance for workplace and assets (10947)
- 6.2.4 Manage security (10948)
- 6.2.5 Manage facilities operations (10949)

6.3 Dispose of productive and non-productive assets (10940)

- 6.3.1 Develop exit strategy (10952)
- 6.3.2 Perform sale or trade (10953)
- 6.3.3 Perform abandonment (10954)

6.4 Manage physical risk (11207)

7.0 Manage Environmental Health and Safety (EHS) (11179)

7.1 Determine health, safety, and environment impacts (11180)

- 7.1.1 Evaluate environmental impact of products, services, and operations (11186)
- 7.1.2 Conduct health and safety and environmental audits (11187)

7.2 Develop and execute health, safety, and environmental program (11181)

- 7.2.1 Identify regulatory and stakeholder requirements (11188)
- 7.2.2 Assess future risks and opportunities (11189)
- 7.2.3 Create EHS policy (11190)
- 7.2.4 Record and manage EHS events (11191)

7.3 Train and educate employees (11182)

 7.3.1 Communicate EHS issues to stakeholders and provide support (11192)

7.4 Monitor and manage health, safety, and environmental management program (11183)

7.4.1 Manage EHS costs and benefits (11193)

7.4.2 Measure and report EHS performance (11194)

- 7.4.2.1 Implement emergency response program (11196)
- 7.4.2.2 Implement pollution prevention program (11197)
- 7.4.3 Provide employees with EHS support (11195)

7.5 Ensure compliance with regulations (11184)

- 7.5.1 Monitor compliance (11198)
- 7.5.2 Perform compliance audit (11199)
- 7.5.3 Comply with regulatory stakeholders requirements (11200)

7.6 Manage remediation efforts (11185)

- 7.6.1 Create remediation plans (11201)
- 7.6.2 Contact and confer with experts (11202)
- 7.6.3 Identify/dedicate resources (11203)
- 7.6.4 Investigate legal aspects (11204)
- 7.6.5 Investigate damage cause (11205)
- 7.6.6 Amend or create policy (11206)

8.0 Manage External Relationships (10012)

8.1 Build investor relationships (11010)

- 8.1.1 Plan, build, and manage lender relations (11035)
- 8.1.2 Plan, build, and manage analyst relations (11036)
- 8.1.3 Communicate with shareholders (11037)

8.2 Manage government and industry relationships (11011)

- 8.2.1 Manage government relations (11038)
- 8.2.2 Manage relations with quasi-government bodies (11039)
- 8.2.3 Manage relations with trade or industry groups (11040)
- 8.2.4 Manage lobby activities (11041)

8.3 Manage relations with board of directors (11012)

- 8.3.1 Report results (11042)
- 8.3.2 Report audit findings (11043)

8.4 Manage legal and ethical issues (11013)

- 8.4.1 Create ethics policies (11044)
- 8.4.2 Manage corporate governance policies (11045)
- 8.4.3 Develop and perform preventative law programs (11046)
- 8.4.4 Ensure compliance (11047)
 - 8.4.4.1 Plan and initiate compliance program (11053)
 - 8.4.4.2 Execute compliance program (11054)

8.4.5 Manage outside counsel (11048)

- 8.4.5.1 Assess problem and determine work requirements (11056)
- 8.4.5.2 Engage/retain outside counsel if necessary (11057)
- 8.4.5.3 Receive strategy/budget (11058)
- 8.4.5.4 Receive work product and manage/ monitor case and work performed (11059)
- 8.4.5.5 Process payment for legal services (11060)
- 8.4.5.6 Track legal activity/performance (11061)

8.4.6 Protect intellectual property (11049)

- 8.4.6.1 Manage copyrights and patents (11062)
- 8.4.6.2 Maintain intellectual property rights and restrictions (11063)
- 8.4.6.3 Administer licensing terms (11064)
- 8.4.6.4 Administer options (11065)
- 8.4.7 Resolve disputes and litigations (11050)
- 8.4.8 Provide legal advice/counseling (11051)
- 8.4.9 Negotiate and document agreements/contracts (11052)

8.5 Manage public relations program (11014)

- 8.5.1 Manage community relations (11066)
- 8.5.2 Manage media relations (11067)
- 8.5.3 Promote political stability (11068)
- 8.5.4 Create press releases (11069)
- 8.5.5 Issue press releases (11070)

9.0 Manage Knowledge, Improvement, and Change (10013)

9.1 Create and manage organizational performance strategy (11071)

- 9.1.1 Create enterprise measurement systems model (11075)
 - 9.1.1.1 Establish performance measures (11080)
 - 9.1.1.2 Establish performance monitoring frequency (11081)
 - 9.1.1.3 Set performance targets (11082)
- 9.1.2 Measure process productivity (11076)
- 9.1.3 Measure cost effectiveness (11077)
- 9.1.4 Measure staff efficiency (11078)
- 9.1.5 Measure cycle time (11079)

9.2 Benchmark performance (11072)

- 9.2.1 Conduct performance assessments (11083)
- 9.2.2 Develop benchmarking capabilities (11084)
- 9.2.3 Conduct process benchmarking (11085)
 - 9.2.3.1 Compile & update list of processes & organizations to benchmark (11089)
 - 9.2.3.2 Establish benchmarks (11090)

9.2.3.3 Measure performance against benchmarks (11091)

9.2.4 Conduct competitive benchmarking (11086)

- 9.2.4.1 Compile & update list of processes & organizations to benchmark (11092)
- 9.2.4.2 Establish benchmarks (11093)
- 9.2.4.3 Measure performance against benchmarks (11094)
- 9.2.5 Conduct gap analysis to understand the need for and the degree of change needed (11087)
- 9.2.6 Establish need for change (11088)

9.3 Develop enterprise-wide knowledge management (KM) capability (11073)

- 9.3.1 Develop KM strategy (11095)
 - 9.3.1.1 Develop governance model (11100)
 - 9.3.1.2 Establish a central KM core group (11101)
 - 9.3.1.3 Define roles and accountability of the core group versus operating units (11102)
 - 9.3.1.4 Develop funding models (11103)
 - 9.3.1.5 Identify links to key initiatives (11104)

	9.3.1.6	Develop core KM methodologies (11105)	9.4	Manage change (11074)		
	9.3.1.7	Assess IT needs and engage IT function (11106)		9.4.1	-	change (11134)
	9.3.1.8	Develop training and communication plans		0	9.4.1.1	Select process improvement methodology
		(11107)			0	(11138)
	9.3.1.9	Develop change management approaches			9.4.1.2	Assess readiness for change (11139)
		(11108)			9.4.1.3	Determine stakeholders (11140)
	9.3.1.10	Develop strategic measures and indicators			9.4.1.4	Engage/Identify champion (11141)
		(11109)			9.4.1.5	Form design team (11142)
9.3.2		knowledge management capabilities (11096)			9.4.1.6	Define scope (11143)
	9.3.2.1	Assess maturity of existing KM initiatives			9.4.1.7	Understand current state (11144)
		(11110)			9.4.1.8	Define future state (11145)
	9.3.2.2	Evaluate existing knowledge management			9.4.1.9	Conduct risk analysis (11146)
		approaches (11111)			9.4.1.10	Assess cultural issues (11147)
	9.3.2.3	Identify gaps and needs (11112)			9.4.1.11	Establish accountability for change
	9.3.2.4	Enhance/modify existing knowledge			0.4.4.0	management (11148)
	0005	management approaches (11113)			9.4.1.12	Identify barriers to change (11149)
	9.3.2.5	Develop new knowledge management			9.4.1.13	Determine change enablers (11150)
	0.0.0	approaches (11114)			9.4.1.14	Identify resources and develop measures
	9.3.2.6	Implement new knowledge management				(11151)
0.00		approaches (11115)		9.4.2		the change (11135)
9.3.3	•	and plan KM projects (11097)			9.4.2.1	Assess connection to other initiatives (11152)
	9.3.3.1	Identify strategic opportunities to apply KM			9.4.2.2	Develop change management plans (11153)
	9.3.3.2	approach(es) (11116) Identify KM requirements and objectives			9.4.2.3 9.4.2.4	Develop training plan (11154) Develop communication plan (11155)
	9.3.3.2	(11117)			9.4.2.4	Develop rewards/incentives plan (11156)
	9.3.3.3	Assess culture and readiness for KM approach			9.4.2.6	Establish metrics (11157)
	5.5.5.5	(11118)			9.4.2.7	Establish/Clarify new roles (11158)
	9.3.3.4	Identify appropriate KM methodologies			9.4.2.8	Identify budget/roles (11159)
	0.0.0.1	(e.g., self-service, communities, transfer, etc.)		9.4.3		ent change (11136)
		(11119)		J. 4 .J	9.4.3.1	Create commitment for improvement/change
	9.3.3.5	Create business case and obtain funding			J.4.J.1	(11160)
		(11120)			9.4.3.2	Reengineer business processes and systems
	9.3.3.6	Develop project measures and indicators				(11161)
		(11121)			9.4.3.3	Support transition to new roles or exit
9.3.4	Design a	and launch KM projects (11098)				strategies for incumbents (11162)
	9.3.4.1	Design process for knowledge sharing,			9.4.3.4	Monitor change (11163)
		capture, and use (11122)		9.4.4	Sustain	improvement (11137)
	9.3.4.2	Define roles and resources (11123)			9.4.4.1	Monitor improved process performance
	9.3.4.3	Identify specific IT requirements (11124)				(11164)
	9.3.4.4	Create training and communication plans			9.4.4.2	Capture and reuse lessons learned from
		(11125)				change process (11165)
	9.3.4.5	Develop change management plans (11126)			9.4.4.3	Take corrective action as necessary (11166)
	9.3.4.6	Design recognition and reward approaches				
	0.0.4.7	(11127)				
	9.3.4.7	Design and plan launch of KM project (11128)				
	9.3.4.8	Deploy the KM project (11129)				
9.3.5	Manage the KM project life cycle (11099)					
	9.3.5.1	Assess alignment with business goals (11130)				
	9.3.5.2	Evaluate impact of KM (strategy and projects)				
	0252	on measures and outcomes (11131)				
	9.3.5.3	Promote and sustain activity and involvement (11132)				
	9.3.5.4	Realign and refresh KM strategy and				
	3.3.3.4	approaches (11133)				
		αρρισαστίου (11100)				



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